

**FINAL  
MITIGATED NEGATIVE DECLARATION**

**Mill Creek Watershed Young Forest Restoration Plan,  
Del Norte Coast Redwoods State Park**

**April 2, 2012**



State of California  
**DEPARTMENT OF PARKS AND RECREATION**

FINAL  
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Final Mitigated Negative Declaration

APR 11 2012



## MITIGATED NEGATIVE DECLARATION

**PROJECT:** Mill Creek Watershed Young Forest Restoration Plan

**LEAD AGENCY:** California Department of Parks and Recreation

### **AVAILABILITY OF DOCUMENTS:**

The Initial Study for this Mitigation Negative Declaration was made available throughout the 30-day public review period at the reference desks of the Del Norte County Library located in Crescent City. It was also available at the public information desks of the Department of Parks and Recreation (DPR) Northern Service Center, North Coast Redwoods District Headquarters, Redwood National and State Parks Headquarters, and on the DPR website. The final Mitigated Negative Declaration and all supporting materials will be available by request at DPR's North Coast Redwoods District Headquarters office.

### **FINDINGS:**

An Initial Study has been prepared to assess the proposed project's potential impacts on the environment and the significance of those impacts and is incorporated in the Draft MND. Based on this Initial Study, it has been determined that the proposed project would not have any significant impacts on the environment, once all proposed mitigation measures have been implemented. This conclusion is supported by the following findings:

- There was no potential for adverse impacts on Agricultural, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Transportation/Traffic, and Utilities and Service Systems.
- Potential adverse impacts resulting from the proposed project were found to be less than significant in Aesthetics, Air Quality, Geological, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, and Recreation.
- Full implementation of the proposed mitigation measures included in this MND would reduce potential project-related adverse impacts on Biological, and Cultural.

### **PROJECT DESCRIPTION:**

California State Parks proposes to conduct forest restoration of approximately 941 hectares (2,325 ac) of formerly harvested areas by mechanically thinning (using chainsaws) the stands. The intent of the restoration is to accelerate the trajectory of the previously harvested stands to a late-seral condition that more closely resembles an old growth forest. The proposed forest restoration will promote species composition change as well as structural change that together favors the development of improved habitat for native flora and fauna, increased soil stability, and reduced slope/water temperatures.

This project proposes to reduce tree densities within the 915 ha (2,261 ac) of forest that survey results show have more than 202 tph (500 tpa). There are an additional 26 ha

(63 ac) where competing brush threatens to reduce tree densities below levels necessary for the rapid development of late-seral characteristics. This project proposes to cut brush to in order to release these trees in these 26 ha (63 ac). A map of all stands to be treated (Figure 6, Appendix A) will be compared to the road decommissioning schedule to help choose which stands are treated in a given year. Stands will then be chosen for thinning each year based on if and when access would become more difficult, how much access would be affected, the number of trees per hectare within each stand, and the stand's overall degree of impairment. Additional factors such as connectivity, condition of adjacent stands, and the percentage a given subwatershed treated within a 3-5 year period will also be considered.

Smaller trees that are restricting the growth of neighboring "larger" coniferous trees will be thinned. The selection of trees to remain will be based on the appropriate species for the site and the size and health of the tree. The largest, healthiest trees of the appropriate species for the site will be retained while the smaller trees (of species that are more abundant than prior to harvesting) are more likely to be cut.

Prescriptions will generally leave fewer trees than a pre-commercial thinning that might be conducted on an industrial forest of similar conditions. The lower residual tree density will allow retained trees to grow rapidly for a longer period before competition from neighboring trees impedes growth. A minimum of 185 tph (75 tpa) will be retained after treatment and most stands will have at least 370 tph (150 tpa) retained. No trees larger than 38 cm (15 inch) diameter at breast height (DBH) will be cut. The spacing between trees will also be more variable than under more traditional precommercial thins and therefore better able to promote diversity and the relatively rapid development of late-seral conditions (Carey 2003, Carey et al. 1999, O'Hara et al. 2010).

#### **MITIGATION MEASURES:**

The following mitigation measures have been incorporated into the scope of work for the Mill Creek Watershed Young Forest Restoration Plan and will be fully implemented by DPR to avoid or minimize adverse environmental impacts identified in this MND. These mitigation measures will be included in contract specifications and instructions to DPF personnel involved in implementing the project.

#### **MITIGATION MEASURE BIOLOGICAL 1 – SENSITIVE PLANTS**

Avoidance is the primary means of mitigation for plants listed as Rare, Threatened, and Endangered, or which occur on the CNPS Lists 1A, 1B or 2 (see below). These measures are dependent on the species natural history and the potential for adverse effects or take. CNPS List 3 and 4 plants will be avoided when feasible; however, mitigation will not be required.

<b>Species Name</b>	<b>Common Name</b>	<b>Mitigation</b>
		WETLAND SHADE ASSOCIATED SPECIES
<i>Mitella caulescens</i>	leafy-stemmed mitrewort	A 75-foot equipment exclusion zone shall be established around plants
<i>Coptis laciniata</i>	Oregon goldthread	
<i>Sanguisorba officinalis</i>	great burnet	

or populations. Within this buffer the overstory canopy shall not be altered or removed nor shall the hydrology associated with the habitat be altered.

		WETLAND ASSOCIATED SPECIES
<i>Calamagrostis crassiglumis</i>	Thurber's reed grass	A 25-foot equipment exclusion zone shall be established around plants or populations. The hydrology associated with this habitat shall not be altered.
<i>Carex leptalea</i>	flaccid sedge	
<i>Carex praticola</i>	northern meadow sedge	
<i>Carex serpenticola</i>	serpentine sedge	
<i>Carex viridula</i> var. <i>viridula</i>	green sedge	
<i>Castilleja miniata</i> ssp. <i>elata</i>	Siskiyou paintbrush	
<i>Epilobium oreganum</i>	Oregon fireweed	
<i>Lathyrus palustris</i>	marsh pea	
<i>Montia howellii</i>	Howell's montia	
<i>Packera Hesperia</i>	western ragwort	
<i>Pinguicula macroceras</i>	horned butterwort	
<i>Potamogeton foliosus</i> ssp. <i>fibrillosus</i>	fibrous pondweed	
<i>Sagittaria sanfordii</i>	Sanford's arrowhead	
<i>Viola palustris</i>	alpine marsh violet	
<i>Viola primulifolia</i> ssp. <i>occidentalis</i>	western white bog violet	

		FOREST SHADE ASSOCIATED SPECIES
<i>Asarum marmoratum</i>	marbled wild ginger	A 75-foot equipment exclusion zone shall be established around plants or populations. Within this buffer the overstory canopy shall not be altered or removed.
<i>Erythronium hendersonii</i>	Henderson's fawn lilly	
<i>Erythronium howellii</i>	Howell's fawn lilly	
<i>Erythronium oregonum</i>	giant fawn lily	
<i>Erythronium revolutum</i>	coast fawn lily	
<i>Fissidens pauperculus</i>	minute pocket moss	
<i>Gentiana setigera</i>	Mendocino gentian	
<i>Lewisia oppositifolia</i>	opposite-leaved lewisia	
<i>Monotropa uniflora</i>	ghost-pipe	
<i>Packera bolanderi</i> var. <i>bolanderi</i>	seacoast ragwort	
<i>Piperia candida</i>	white-flowered rein orchid	
<i>Cascadia nuttallii</i>	Nuttall's saxifrage	

#### FOREST AND SCRUB

		ASSOCIATED SPECIES
<i>Arabis koehleri</i> var. <i>stipitata</i>	Koehler's stipitate rock cress	A 25-foot equipment exclusion zone shall be established around plants or populations.
<i>Arabis macdonaldiana</i>	McDonald's rock cress	
<i>Asplenium trichomanes</i> ssp. <i>trichomanes</i>	maidenhair spleenwort	
<i>Boschniakia hookeri</i>	small groundcone	
<i>Cardamine nuttallii</i> var. <i>gemmata</i>	yellow-tubered toothwort	
<i>Eriogonum pendulum</i>	Waldo wild buckwheat	
<i>Gilia capitata</i> ssp. <i>pacifica</i>	Pacific gilia	
<i>Lilium occidentale</i>	western lily	
<i>Lomatium martindalei</i>	Coast Range lomatium	
<i>Minuartia howellii</i>	Howell's sandwort	
<i>Oenothera wolfii</i>	Wolf's evening primrose	
<i>Polemonium carneum</i>	Oregon polemonium	
<i>Pyrrocoma racemosa</i> var. <i>congesta</i>	Del Norte pyrrocoma	
<i>Sidalcea malachroides</i>	Maple-leaved checkerbloom	
<i>Sidalcea malviflora</i> spp. <i>patula</i>	Siskiyou checkerbloom	
<i>Sidalcea oregana</i> spp. <i>eximia</i>	Coast checkerbloom	
<i>Silene serpentinicola</i>	serpentine catchfly	
<i>Streptanthus howellii</i>	Howell's jewelflower	
<i>Thermopsis robusta</i>	Robust false lupine	

## MITIGATION MEASURE BIOLOGICAL 2 – NORTHERN SPOTTED OWL

1. No operations shall occur unless a valid NSO technical assistance has been obtained from the U.S. Fish & Wildlife Service (Service).
2. Surveys for the NSO shall be conducted in conformance with accepted Service approved NSO survey protocols. A map showing the location(s) of known (if any) NSO activity centers within the project area or affected by the project during the past 3 years shall be provided. An activity center is defined as a site(s) identified through surveys conducted to protocol resulting in either the presence of nesting, pair status, or resident single status as defined in the northern spotted owl protocol (USFWS 1992). The final determination of an activity center is at the discretion of the Service.
3. If any known activity centers occur within 0.25 mile of the proposed action then the following standard protection measures shall apply.
  - a) A buffer zone for NSO's shall be established within a 1,000 foot radius of a tree or trees containing a nest or supporting an activity center during the



NSO's critical nesting period which occurs from February 1 through August 31.

- b) No operations shall occur within a 500-foot radius of an activity center. Within the 500 foot to 1,000 foot spatial buffer the minimum habitat requirements of functional roosting habitat (minimum 60% canopy, avg. stand trees >11" dbh) shall be maintained.

### MITIGATION MEASURE BIOLOGICAL 3 - RAPTORS

1. Prior to the start of project-related work a CSP inspector shall be instructed in the identification of raptor nests (both occupied and unoccupied) and raptor breeding behavior by the District's Senior Environmental Scientist or his designee. During operations the inspector shall be responsible for assuring that no raptor nests are impacted by the proposed treatments by implementing the following measures:
2. If an unoccupied raptor nest is detected (during the critical nesting period of January 15 through August 31), the nest tree and surrounding screen trees will not be disturbed and the location shall immediately be reported to the Senior Environmental Scientist.
3. If an occupied raptor nest is detected in the project area, the CSP inspector will cease operations within ¼ mile of the raptor nest and immediately notify the Senior Environmental Scientist. The Senior Environmental Scientist or his designee will then determine the species of raptor and the following measures.
4. All trees with nests and appropriate screening trees will be retained.

Species Name <sup>1</sup>	Critical Nesting Period	Temporal <sup>2</sup> (Disturbance) Buffer	Spatial <sup>3</sup> (Habitat) Buffer
<b>ACCIPITRIDAE</b>			
Cooper's Hawk	March 1 – August 31	400 m (0.25 mile)	30 m (100 ft.)
Sharp-shinned Hawk	March 1 – August 31	400 m (0.25 mile)	30 m (100 ft.)
Osprey	February 15 – August 31	400 m (0.25 mile)	30 m (100 ft.)
Redtail Hawk		400 m (0.25 mile)	15 m (50 ft.)
Red-shoulder Hawk	February 1 – August 31	400 m (0.25 mile)	15 m (50 ft.)
<b>STRIGIFORMES</b>			
Great Horned Owls	February 1 – August 31	400 m (0.25 mile)	30 m (100 ft.)
Cavity Nesting Owls	February 1 – August 31	400 m (0.25 mile)	30 m (100 ft.)

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<sup>1</sup> Mitigation measures for the northern spotted owl are covered above. Other species of raptors such as the golden eagle, northern harrier, bald eagle, or long-eared owl are not expected to nest within the project area due to lack of habitat and are therefore not addressed.

<sup>2</sup> Temporal buffers are temporary buffers established around nest sites that restrict operations during the species critical nesting period.

<sup>3</sup> Spatial buffers are permanent habitat retention buffers established around a species nest site. Until the nest site is determined to be no longer active (normally after 3 years of no use) habitat modification is not allowed within the buffer.

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#### **MITIGATION MEASURE BIOLOGICAL 4 – MARBLED MURRELET**

1. Where residual trees are located within a project area or within 91 m (300 ft.) of treatment area boundaries, DPR shall consult with the California Department of Fish & Game (DFG) and the Service to determine if the trees constitute potential marbled murrelet nesting habitat.
2. No operations shall occur within 300 feet of occupied or suitable marbled murrelet nesting habitat without DFG consultation.
3. No operations shall occur within 0.25 miles of areas known to be occupied by marbled murrelets during the critical nesting season (March 24 – September 15).
4. No operations shall occur within 0.25 miles of potential marbled murrelet habitat during the critical nesting season unless surveys conducted to protocol have determined that the area is not utilized or occupied by marbled murrelets. This will also trigger consultation with the DFG and technical assistance with the Service.

#### **MITIGATION MEASURE BIOLOGICAL 5 – AMPHIBIANS AND FISH**

1. Areas that provide potential habitat for the Del Norte salamander shall be identified and mapped prior to operations. Spatial buffers that retain the microhabitat of the sites shall be established around areas identified as potential habitat for the Del Norte salamander. The minimum buffer for these sites shall be 15 m (50 ft); however, site specific measures can be developed through consultation with the District's Senior Environmental Scientist and the California Department of Fish & Game provided that the measures are then amended into the MND.
2. No operations will occur 18 m (60 ft) of Class 1 or 2 watercourses
3. No operations will occur within the channel of Class 3 watercourses.

#### **MITIGATION MEASURE CULTURAL 1**

1. Cultural resources, including historical and archaeological resources, will be inventoried prior to operations within the project area. A PRC 5024 document shall be completed. A Cultural Resource Investigation report will be prepared by a DPR Archaeologist with direct oversight by State Park Cultural Resource staff prior to any construction activities.

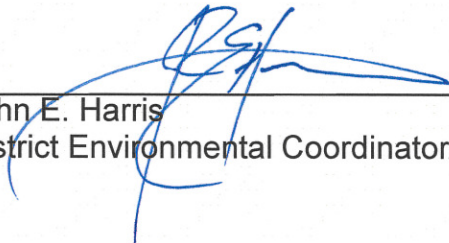


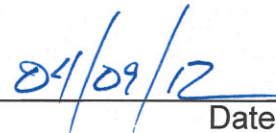
2. Any historic or prehistoric archaeological sites encountered in subsequent archaeological surveys will be flagged with a 10-meter buffer with black and yellow candy-striped flagging for avoidance during project implementation.

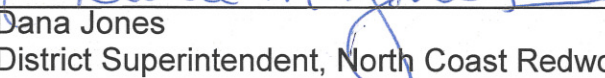
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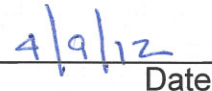
This document, along with the Draft Initial Study/Mitigated Negative Declaration (SCH#2012022010), Comments and Response to Comments; Mitigation Monitoring and Reporting Program; and the Notice of Determination, constitute the Final Mitigated Negative Declaration for the Cuneo Forest Restoration Plan at Del Norte Coast Redwoods State Park.

Pursuant to Section 21082.1 of the California Environmental Quality Act, the California Department of Parks and Recreation (DPR) has independently review and analyzed the Initial Study and Negative Declaration for the proposed project and finds that these documents reflect the independent judgment of DPR. DPR, as lead agency, also confirms that the project mitigation measures detailed in these documents are feasible and will be implemented as stated in the Negative Declaration.

  
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John E. Harris  
District Environmental Coordinator/Senior Environmental Scientist

  
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Date

  
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Dana Jones  
District Superintendent, North Coast Redwoods District

  
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Date

